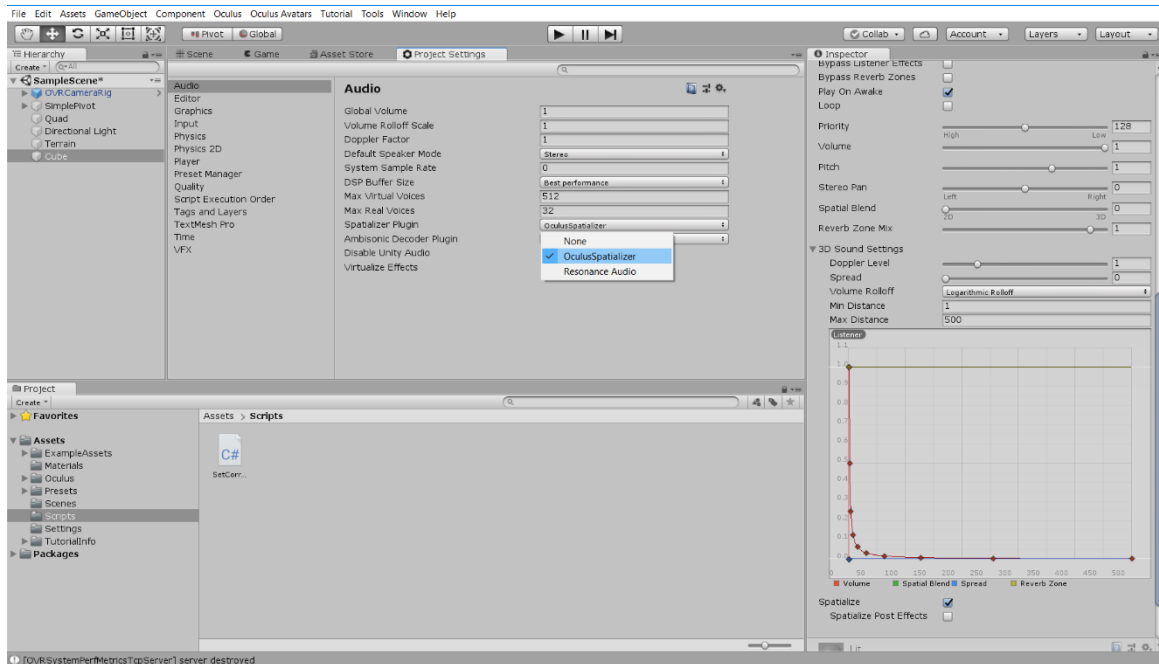


Assignment 5: Setup Sound

Setting Up the Spatializer:

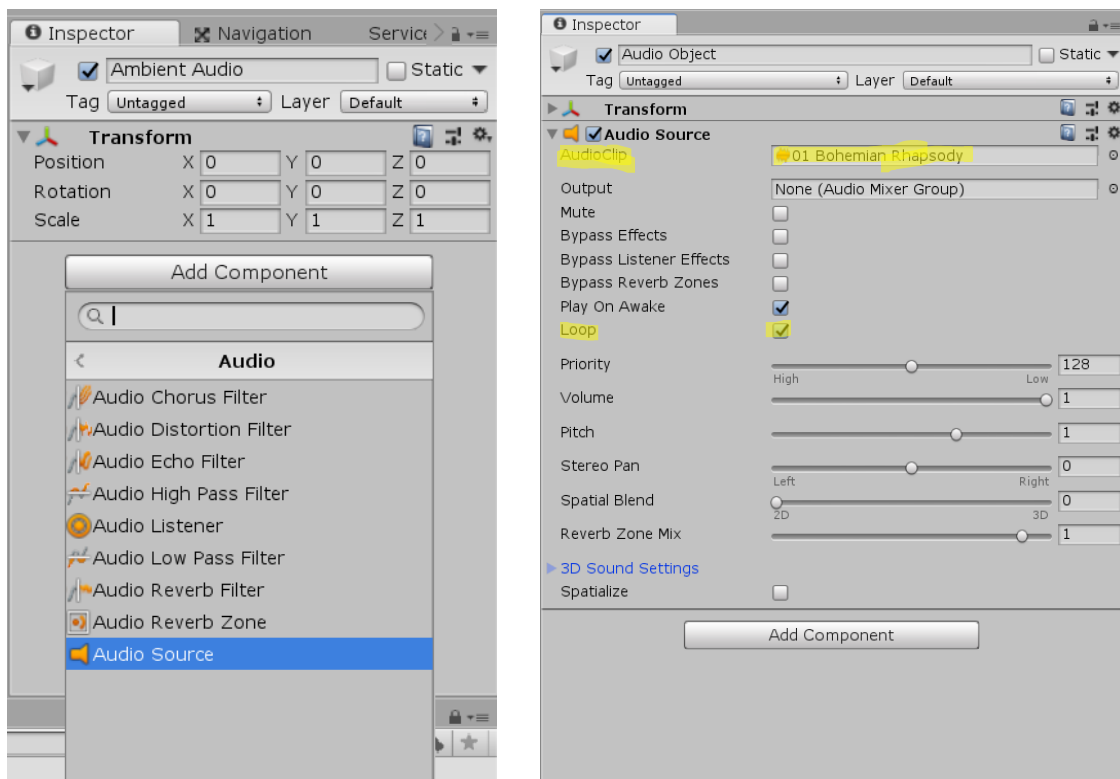
1. In order to use spatialized audio, we need to enable it. To check to see if it is enabled, go to **Edit** -> **Project Settings**. This will bring up the project settings tab. Choose the **Audio** menu on the left side and find the setting labeled **Spatializer**. Click on the dropdown for **Spatializer** and look to see if **Oculus Spatializer** is an option. If it is, select it and **Save Project**, then continue on to part A.



2. If not, you need to install it. You can do this by either **Plugging In an Oculus Headset**. This will enable you to use the spatializer and you can follow step 1 to set it up.
3. If you don't currently have access to an Oculus Headset, you can attempt to install the **Oculus Integration Package**. (**BE CAREFUL DOING THIS** because it could potentially break your project). You can still follow the tutorial and enable the spatializer settings later, if you would like to wait until you have a headset available.
4. If still want to try, you can find the package by going to **Window** -> **Asset Store** and search for **Oculus Integration**. Download and import this package. This may take a while. Once it finishes installing, follow step 1 to enable the spatializer.

Part A: Ambient Audio

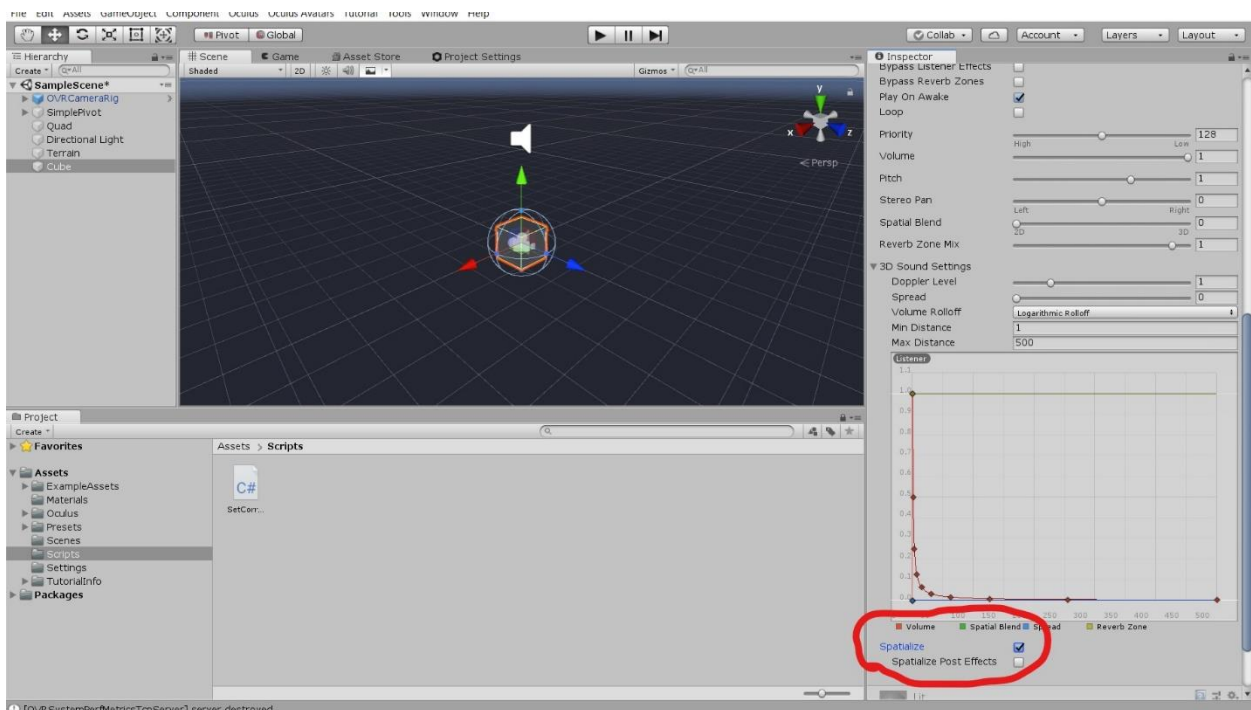
1. Ambient Audio can be heard from anywhere in the scene; therefore, the ambient audio track can be placed anywhere in the scene. For this, make an empty GameObject and name it 'Ambient Audio' or something describing what the audio source is playing.
2. Click on your 'Ambient Audio' object and look at the **Inspector** panel to the right. Scroll to the bottom of the inspector and click the **Add Component** button. A search bar will pop up and you can search for and select '**Audio Source**'; Alternatively you can select from the list **Audio -> Audio Source**.



3. Now we can setup our audio source. If you look in the inspector find the component **Audio Source** component. Feel free to check out all of the attributes, but the one we care about first is the **AudioClip** at the very top. Find your audio file in your **Assets** folder in the **Project** tab. Click on the audio file and drag it to the **AudioClip** property in the inspector.
4. Now the ambient sound should be setup. Feel free to press play and listen. However, you may notice that the sound stops after a certain amount of time. This is because the audio source has reached the end of the track. To make it play repeatedly we can set it to loop. To do this go to the **Audio Source** component again and check the box that says **Loop**. This will restart the track once it finishes playing.

Part B: Spatialized Audio

1. When we interact with objects that make noise, we want to be able to hear them as we move closer to and farther away from them, or they move closer to or farther away from us. Therefore in this case, we will want to attach our audio source directly to the object that is making the noise.
2. Find the object that you want to emit sound from and add an **Audio Source** component to it in the same way that you added your ambient audio source. Same as before, find your Audio Clip in the **Project** tab in the **Assets** folder.
3. In order to make this spatialized, look at the **Audio Source** component in the **Inspector**, and find the **3D Sound Settings** dropdown. Open this and you will see some sliders and a graph. If you have the spatializer enabled, you will see a **Checkbox** below the graph, labeled **Spatialize**. Check this box, and your audio will be setup.



4. If you did not have access to the headset, and don't have Oculus spatializer enabled, you will not see the spatialize button. Once you have used the headset with your project, this will be enabled. Make sure to check this box when your spatializer is enabled.